



Clouds From Both Sides, Now

I have a strange quirk, one of several. When I read sophisticated, technical, political, or commercial articles, I often associate them with a song stowed in my cerebral archive. More accurately, I start hearing the song crescendo in my head to the point I can't concentrate on the article. Such is the case with the latest flood of cloud computing articles.

With big guns like Google, Microsoft, Sun, IBM, Dell, and Amazon seeding cloud computing technology, the forecast is partly cloudy to overcast with an eventual downpour.

Every time I try to get my head into cloud computing, I hear Greg Lake's carnival barker voice from the Emerson, Lake & Palmer song "Karn Evil 9."

Welcome back my friends
To the show that never ends
Were so glad you could attend
Come inside, come inside! [1]

I'm sure you can help me see the light ... or cloud the light? I'm not sure. Distributed computing? Not a problem. Computing Grid? Makes sense for large scale operations. Software-as-a-Service? Emphasize service, and I'm on board. However, cloud computing and its *everything-as-a-service* mantra sounds more like mountebank bellows than a reasoned thesis.

Part the cloud jargon and I see computing rental, leasing, and sharing. You basically rent and share processing time, data storage, security, platforms, applications, and so forth. I know it's so much more than that, but is it?

You don't own it, you can't control it, and it has no intrinsic resale or depreciation value. So why not use rental, lease, or timeshare nomenclature? Not sexy enough, too transparent, or is it burdened with negative connotations of rental and timeshare property? "Yes you, Joe Shmuck, can have your own slice (for two weeks) of paradise anytime you want (except weekends, holidays, on sunny days, and during picturesque sunsets)."

What are the anticipated advantages of cloud computing? Topping the list is the reduction in IT capital expenditures. No servers, computers, applications, storage, or personnel to maintain them. Well, you will likely need some type of computer to connect to the cloud and support to maintain and configure your computers to assure cloud compatibility.

Where do those costs go? The cloud service provider (CSP) picks them up and passes them back to you in a little-extra-fee-for-service. Hey, silver linings are not free! Of course, your monthly cloud bill will be as clear as your cable, phone, or favorite utility bill.

How about device independence? Do you really think I'll be able to use my iPhone to access any cloud? "Sorry sir, iPhones only work with iClouds. For cloud nine you will need the new Nimbostratus from Micro-cloud."

What about access to supercomputing power and flexibility? You want supercomputing? "Miss, supercomputing is for Silver Cloud Members only. All *-ilities* have their own surcharge and you will be required to purchase a cloud security undercoating."

What about the efficiencies of centralization? You mean multi-tenancy? Sure six guys can pool resources to rent an apartment easier than one, but that does not guarantee optimal conditions. When everyone wants to run payroll, invoices, or crunch out the human genome at the same time—not that it would ever happen—how efficient can that be? There is a reason the

American Dream involves single-tenancy, independence, and self-determination. For me, I'll stick with my own little cumulus humilis (a.k.a. a fair weather cloud) and compute along. And, if by chance, we meet on the super jet stream, remember: I'm old school—hey you, get off of my cloud!

I love the argument, "you don't generate your own electricity so why generate your own computing?" My short answer: because I can. My long answer: because electricity is a utility and I'm not ready to concede that the tools I use to create, design, produce, and improve are mere utilities. When I tinker with, tweak, and maintain my computer, I discover new ways to use it and open new doors. Would you ask a Jedi to give up his light saber to timeshare a cloud saber?

How about interoperability? Let's see, there are cloud applications, cloud services, cloud platforms, cloud storage, and competing CSPs. How will these be interoperable, or, "how do you catch a cloud and pin it down?" [2] Wait, I know! The high capital costs to start a CSP will provide a barrier to the CSP market and drive the industry to an oligarchy, monopoly or ... gasp ... a Googleopoly. Then you will have interoperability via collusion, soon followed by National Cloud Care, the Cloud Protection Agency, Cloud Footprints requiring Cloud Offsets, and No Cloud Left Behind.

You can't beat the reliability of cloud computing's multiple servers, sites, and Continuity of Operations Plans (COOP). Oh yes, the ever-present Cloud COOP. Well, if the reliability and service of present-day ISPs are any indication of the reliability and service of future CSPs, then I suggest hip waders. "Sir, I'm looking at our cloud and it is up and fully functional. The problem must be with your thin client. Unfortunately, our cloud coverage does not extend to thin, lean, or slim clients."

Ask Amazon's S3 clients (July 2008) or the London Stock Exchange (September 2008) about reliability and the effects of software as a non-service. But what's a million-dollar trade commission loss amongst cloud members? Besides, that was not real cloud computing, just contrails.

Listen, can you hear Joni Mitchell? She's a true cloud aficionado:

I've looked at clouds from both sides now
From up and down, and still somehow
It's cloud illusions I recall
I really don't know clouds at all. [3]

Don't let me rain on your parade or cloud your judgment. You may find a silver lining in them thar computer clouds. I've been wrong before and I'm sure I'll be wrong again. If you must ... send in the clouds ... there ought to be clouds ... well, maybe next year.

—Gary A. Petersen
Arrowpoint Solutions, Inc.

References

1. Emerson, Lake & Palmer. "Karn Evil 9 (1st Impression Part 2)." *Brain Salad Surgery*. Atlantic Records, 1973.
2. Rodgers, Richard, and Oscar Hammerstein II. "Maria." *The Sound of Music*. 1965.
3. Mitchell, Joni. "Both Sides, Now." *Both Sides Now*. Warner Brothers, 2000.